

pleasing. Wetlands are very special places. wilderness — spiritually uplifting and aesthetically ever more hectic, wetlands exist as areas of effective cleft becoming more crowded, with a pace of living water, and provide recreational opportunities. In so-lands recharge groundwater, reduce flooding, purify 136 kinds of birds, 32 species of fish, 21 varieties of mammals, and 12 kinds of reptiles. In addition, wet-ries used a wetland including 489 species of plants on the continent. One study found that almost 700 spe-lations. Wetlands are the most productive ecosystems The loss of wetlands is felt beyond waterfowl popu-wings is disappearing at an alarming rate.

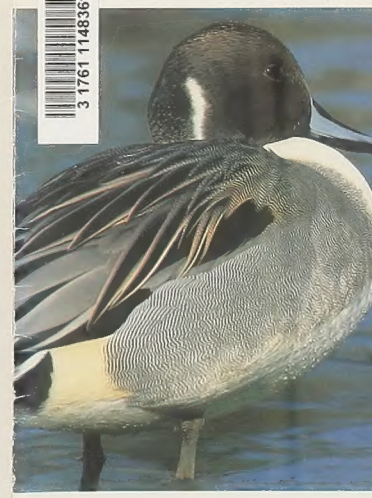
are also severe, with over 70% of wetlands lost in or about 120,000 hectares (ha) per year. Canada's loss- tion continues today, at the rate of about 300,000 acres half the original wetlands have been lost. That destruc- pend on them, are in trouble in the United States, over Wetlands, and the wide variety of wildlife that de-

DAILY A THOUSAND ACRES OF WETLAND HABITAT IS DESTROYED



Richard Anderson

## Join Us In a Partnership For Wetlands



Government Publications



Mark Wilson/FWS

MORE THAN 133 MILLION PEOPLE PARTICIPATE IN WILDLIFE-ORIENTED ACTIVITIES.

For more information on how you can help the North American Waterfowl Management Plan protect our wetland resources, write:



U.S. Department of the Interior  
Fish & Wildlife Service  
Arlington Square-NAWMP  
1849 C St N.W.  
Washington, DC 20240

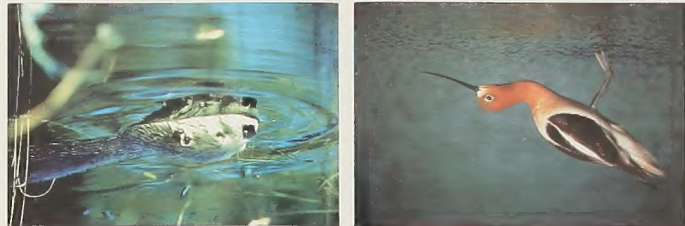


Environment Canada  
CWS-NAWMP Implementation Branch  
Ottawa, Ontario K1A-0H3

A BROAD ARRAY OF WILDLIFE, FISH, AND OTHER AQUATIC ORGANISMS DEPEND ON WETLANDS.



FWS Photo



FWS Photo

With a price tag of at least 1.5 billion dollars for the habitat component alone, this unprecedented effort has moved from the planning stage to actual implementation. From the Canadian prairies to the Gulf Coast, from California's Central Valley to tidal marshes in Nova Scotia — the effort to preserve important and varied wet-land habitat is underway.

Biologists have identified 34 geographical areas in Canada and the U.S. of special importance to North America's waterfowl populations. Eleven Joint Ventures,

Scott Nielsen/Ducks Unlimited, Inc.

FWS Photo

The NAWMP uses many approaches to protect, restore and enhance wetlands. Habitat can be purchased, leased, or protected with conservation easements. Landowners are offered economic incentives for farming practices that benefit waterfowl, from planting dense cover for nesting birds to reflooding rice fields after harvest for wintering waterfowl. Bottomlands, once cleared for agriculture, are being reforested, and wetlands are being restored as drainage ditches are closed. In the long run, all wetland dependent plants, animals, reptiles, and insects will benefit from these changes.

The nine habitat Joint Ventures include:

**Canadian Prairie Habitat:** Manitoba, Saskatchewan, and Alberta contain the continent's most important breeding areas for mallards, pintails, and many shore and waterfowl. The NAWMP proposes to protect and enhance 3.6 million acres (about 1.5 million ha) of habitat in this area. Saskatchewan's Quill Lakes



BLACK DUCK

Scott Nielsen/Ducks Unlimited



Clayton D. Chambers/Ducks Unlimited, Inc.

*There are some very special places  
Where time stands still,  
And waterfowl wings whistle  
In the half-light before dawn.*

To insure that such places are preserved for future generations, the United States and Canada have joined in an unprecedented effort to preserve wetland habitat and restore waterfowl populations. Much has been accomplished; much remains to be done.

At stake is North America's wetland and waterfowl heritage.





SCULPIN

Scott Nielsen/Ducks Unlimited, Inc.

project, protecting a major staging area for ducks and geese, is now well underway — using a combination of land purchases and water conservation practices on private land.

**Eastern Habitat:** This Joint Venture covers all or portions of the Canadian Provinces of Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland. Over 617,000 acres (250,000 ha) of important wetlands and coastal habitat are currently scheduled to be enhanced or restored under the Plan, and landowner incentives will affect the management of an additional 3,950,000 acres (1,600,000 ha) of land. Land acquisition began in 1989 for Ontario's Matchedash Bay Project, designed to protect a critical waterfowl staging area now threatened by development.

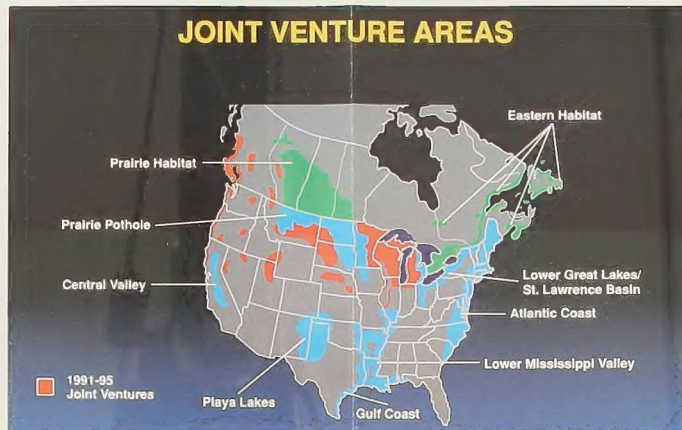
**Prairie Pothole:** Legacy of the last glacier, the numerous wetland basins of the Dakotas, Iowa, Minnesota, and Montana provide the most important waterfowl nesting habitat in the "Lower 48." Over half the wetlands that once existed in this area have been lost to agricultural drainage. The NAWMP seeks to protect and enhance over 1.1 million acres (about 500,000 ha) of wetlands and adjacent uplands here. The Lake Thompson project in South Dakota is well underway, and involves protection and private habitat improvement programs throughout a 500-square mile (1,400 square kilometers) watershed. Similar activities have been initiated at the Chase Lake Project in North Dakota, and other key projects are underway in adjacent states.

**Lower Mississippi:** Covering portions of ten states, this Joint Venture seeks to provide protection for forested wetlands, more than 80% of which have been drained and cleared for agriculture or urban development. Some 300,000 acres (about 120,000 ha) of forested wetlands, especially important for wintering mallards and wood ducks, will be preserved. The Lower Mississippi has been one of the most complex Joint Ventures to date, with major land protection projects underway along the Mississippi River and its tributaries.

**California Central Valley:** Previous habitat loss in this Joint Venture has been very severe, with 95% of the original wetlands lost, mostly through agricultural drainage. Sixty percent of the ducks, geese, swans, and millions of shorebirds of the Pacific flyway crowd into the scant 280,000 acres (over 110,000 ha) that remain. Plans call for the creation of 120,000 acres (about 50,000 ha) of new wetlands on marginal farmland, and nearly 750,000 acres (300,000 ha) of wetland enhancement on public and private lands. In addition to purchasing wetlands, the NAWMP has utilized incentive programs for private landowners in this area. Programs that provide for reflooding of grainfields after harvest, for example, are increasing the acreage of land available for wintering birds.

**Lower Great Lakes/St. Lawrence Basin:** With emphasis on restoring black duck populations, this Joint Venture will concentrate on wetlands surrounding the Great Lakes and adjacent to the St. Lawrence River Basin. Plans call for protection and enhancement of 10,000 acres (4,000 ha) in the U.S. including the acquisition of black duck breeding habitat in New York's Adirondack Mountains. A major purchase of important marshland in the Saginaw Bay area of Lake Huron has been completed.

**Atlantic Coast:** Reaching from Maine to South Carolina, this area provides vital breeding, migration and wintering habitat for most species of waterfowl and



PRESENT AND FUTURE JOINT VENTURES

**Playa Lakes:** Newest of the Joint Ventures, established in 1989, Playa Lakes will seek to protect geologically-unique playa wetland basins found in Texas, New Mexico, Oklahoma, Kansas, and Colorado. The Plan will seek to protect at least 40 functional habitat units, consisting of playa wetlands and associated uplands, each capable of accommodating 100,000 ducks and geese.

**Future Joint Ventures:** Planning is underway for Joint Ventures in the Intermountain West, Great Plains, Pacific Coast, Rainwater Basin, Upper Mississippi River-Great Lakes, and other areas. For example, the Pacific Coast Joint Venture will focus on 300,000 acres (120,000 ha) of wetland habitat from the northern coast of British Columbia to northern California. This area is vital for breeding and wintering waterfowl, shorebirds, eagles, and many mammal and fish species. This Joint Venture will be the first truly international cooperative habitat effort under the NAWMP.



CANADA GEES

Scott Nielsen/Ducks Unlimited, Inc.

shorebirds. A total of 60,000 acres (25,000 ha) of coastal and intercoastal wetlands will be protected as this Joint Venture is carried out. As part of this effort, in 1989 the Cape May National Wildlife Refuge was established on the New Jersey coast, providing protection for crucial shorebird and raptor habitat. An extensive new project is underway in the ACE Basin of South Carolina.

**Gulf Coast:** Stretching along the Gulf of Mexico from Texas to Alabama, this area provides essential wintering habitat for nearly 400,000 geese, and almost a fourth of all dabbling ducks. Plans call for protecting at least 386,000 acres (155,000 ha) of this vital habitat, with major projects underway in Joint Venture states.



PIPING PLOVER

Glen Chambers/Ducks Unlimited, Inc.



John Ludemann

WETLANDS ARE THE MOST PRODUCTIVE ECOSYSTEMS ON THE CONTINENT.



WATERFOWL HUNTING IS A MULTI-BILLION DOLLAR RECREATIONAL ACTIVITY.

Glen D. Chambers/Ducks Unlimited, Inc.



BOTH RECREATIONAL USERS AND FISH BENEFIT FROM WETLANDS.

Robert Bridges/PWS

The North American Waterfowl Management Plan and its Joint Ventures are broad partnerships among governments, agencies, organizations, corporations, and individuals who care about our wetlands and waterfowl heritage. You can support Plan efforts by getting involved in a Joint Venture, being active in local and national decision-making processes, or contributing to conservation organizations and foundations which support Plan efforts. Together, we must all do our part to manage wisely our waterfowl and wetland resources so as to preserve the heritage of whistling wings for future generations. **Join us in a partnership for wetlands.**